REMARKS

INTRODUCTION

In accordance with the following, reconsideration of the allowability of the pending claims is respectfully requested.

Claims 1-44 are pending and under consideration.

REQUEST FOR CONSISTENT REJECTION REFERENCE RELIANCE

Applicants respectfully request any further Actions merely rely upon a <u>single</u> reference from each relied upon family.

For example, the Office Action has relied upon <u>Ogihara</u>, U.S. Patent No. 6,868,051 <u>or Ogihara</u>, European Patent No. 1191529; and <u>Hwang</u>, European Patent No. 1041553 <u>or JP 2000-285582</u> (as the US family member U.S. Patent No. 6,816,443 is not available under 35 USC §103(c)).

When rejecting claims 1-5, 15, 16, 18, 27, 28, and 30 under 35 USC §103(a), the Office Action relies upon Ogihara, U.S. Patent No. 6,868,051 or European Patent No. 1191529, and Hwang, European Patent No. 1041553.

When rejecting claims 1, 2, 15, and 27 under 35 USC §103(a), the Office Action relies upon Watanabe et al., U.S. Patent No. 6,493,304, and Japanese Patent No. 2000-285582 (Hwang), while explaining that Hwang, U.S. Patent No. 6,816,443, is an equivalent English language version of JP2000-285582.

It is believed that the different reliance on different family members in different rejection chains is problematic as to what each reference particularly discloses and to which portion of any of the references are actually be discussed.

As <u>Ogihara</u> can be merely referenced by <u>U.S. Patent No. 6,868,051</u> and <u>Hwang</u> can be merely referenced by <u>European Patent No. 104155</u>, applicants respectfully request the Examiner limit the reliance on alternate foreign references from the same families to ensure that all rejections and all responses clearly address the appropriate disclosures and simplify issues for Appeal.

IMPROPER ISSUANCE OF FINAL OFFICE ACTION

It is respectfully submitted that the Finality of the outstanding Office Action is improper.

Though the Office Action indicates that the previous Office Action has been withdrawn and/or the finality of the same withdrawn, it is respectfully submitted that the improperness of the Office Action issued March 28, 2008 cannot be cured by another Final Office Action merely withdrawing the Finality of the previous Office Action and removing the improper final rejection of claims 6-8.

The March 28, 2008 Office Action was required to be non-final.

Again, in the relevant previous response, claims 6-8 were merely amended into independent form, without any amendment changing the scope or breadth of the same. Thus, the new rejection of claims 6-8 in the March 28, 2008 Office Action was not necessitated by amendment and should have been <u>non-final</u>.

Further, the effective maintenance of the finality of the current Office Action while the previous finality was still being maintained removed avenues of either amendment or remarks from applicant that would have been available if the finality were withdrawn before the outstanding Final Office Action.

Accordingly, withdrawal of the Finality of the outstanding Office Action and issuance of a non-final Office Action is respectfully requested.

FAILURE TO ADDRESS PREVIOUS REMARKS

As noted in at least MPEP 707.07(f), the Examiner is required to answer and address <u>all</u> traversals. This requirement is in addition to any repetition of a previously held position and is required to allow the applicant a chance to review the Examiner's position as to these arguments and to clarify the record for appeal.

The outstanding Office Action has only addressed issues regarding potentially how the relied upon references are being utilized, and briefly concluded that at least some aspect of the different disc discrimination method of Hwang would be equally applicable and apparently interchangeable with the disc discrimination method of Ogihara or Watanabe, but has failed to at least address applicants comments regarding MPEP 2143.01, which specifically points out that it would not have obvious to fundamentally change the principle operation of a reference, i.e., regardless of a potential equal end result of disc discrimination, it would not have been obvious to change the principle operation of each of Ogihara or Watanabe.

The Office Action has also failed to address comments regarding the underlying teachings of each of <u>Ogihara</u>, <u>Watanabe</u>, or <u>Hwang</u>, as to what each reference teaches and why each reference implements their respective solutions. As noted previously, and again below, the underlying principles for each reference are <u>substantially</u> important.

Here, regardless of whether references could be modified, or combined, in the manner suggested in the Office Action, that does not make the modification obvious unless the prior art suggested the desirability of the modification. <u>In re Fritch</u>, 972 F. 2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Further noted in MPEP 707.07(f), a failure of the Examiner to address the applicant's traversals can be deemed a failure to rebut these arguments so as to admit that the arguments have overcome the rejection. At the very least, the failure to address the applicant's traversals would render the Examiner's decision to again reject the claims arbitrary and capricious and invalid under the Administrative Procedures Act, 5 U.S.C. § 706, the standard under which such rejections are reviewed in view of <u>Dickinson v. Zurko</u>, 527 U.S. 150, 50 USPQ2d 1930 (1999).

As such, since the Examiner has not fully addressed the applicant's traversals presented in the Amendment of May 27, 2008, it is respectfully requested that the Examiner withdraw the Final Office Action and issue a new Office Action addressing such particular non-obviousness points.

Applicants further request the Examiner particularly address all of applicants current remarks in any further Action.

REJECTION RATIONALES

It is respectfully submitted that the relied upon rejection rationales are improper as failing to present a prima facie obviousness case based upon evidence in the record beyond the conclusions of the Examiner.

A majority of the Office Action rejection rationales appear based upon conclusions of the Examiner, without supporting reasons or evidence in the record.

For example, on pages 2-3 of the Office Action, the rejection first states features of Ogihara that may be interpreted to read on some of the features of independent claim 1, for example, and then identifies features of Hwang that are relied upon to set forth deficient features (or would meet the deficient features if incorporated into Ogihara), and then states:

"It would have been obvious to modify the base system of Ogihara with the teaching from the secondary reference (Hwang) motivation is to properly obtain a disc discrimination predicated upon alternate equivalent signal processing methods using comparison of selected signals with pre-stored values. The examiner concludes that whether one compares the signal of interest with each other to make a discrimination, or alternatively to compare with pre-stored values indicative of the set of media is merely an obvious selection between alternatives with no unexpected results occurring."

This rejection rationale is actually based upon several obviousness conclusions not supported by the record.

There must be evidenced reasons why one skilled in the art would implement the Office Action's proposed modification of the primary reference, or why one skilled in the art would come to the Examiner's conclusion that the collective teaching would suggest or lead one to such a combination.

"The need for specificity pervades this authority. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317(Fed. Cir. 2000) ('particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed'); In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459(Fed. Cir. 1998) ('even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination).' In re Lee, 277 F. 3d 1338, 1343-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002).

In addition to the above, to support the conclusion of obviousness, the Office Action appears to rely upon the methods of <u>Hwang</u> being equivalent or alternative "signal processing methods", and the suggested unexpected results for using such an equivalent or alternative signal processing method in <u>Ogihara</u> or <u>Watanabe</u> would result in expected results.

However, this reliance on the method of <u>Hwang</u>, or any other equivalent or alternative signal processing methods, as being equivalent or an equal alternative, and resulting in expected results <u>must also be evidenced in the record and cannot be based solely on the Examiner's belief or conclusion.</u>

Beginning at the bottom of page 3 and the top of page 4 of the Office Action, the Examiner further makes statements that:

"The examiner then concludes that one of ordinary skill in the art, with these two systems known to him, would consider it an obvious modification to compare the appropriate wobble signal (from Ogihara) not against each other and then yielding a disc determination, but rather a comparison to pre-stored reference values (from Hwang). Such exchange of comparison protocols (indirect to a reference vs. a direct comparison to a reference) is merely a selection of equivalent capabilities-amplitude comparisons...The examiner concludes that it would be

reasonable for one of ordinary skill to expect such exchange of system protocols (comparison capabilities) to yield the same result – an indication of what type of disc is present."

Thus, in addition to the Office Action indicated reason "to properly obtain a disc discrimination", the rejection rationale is further based on the at least **two** assertions that are **not** evidenced in the record, including the examiner's conclusions of what would have been <u>an</u> equivalent or alternative signal processing method, <u>and</u> conclusion that <u>expected results would</u> occur if the same were implemented in Ogihara.

A similar rejection rationale has been set forth for the rejections based upon <u>Watanabe et al.</u>, i.e., the rejections based upon a proposed modification of <u>Watanabe et al.</u> also fail to provide support for the ultimate conclusions of the replacement disc discrimination method being and equivalent or alternative signal processing method, and that expected results would occur if the same were implemented in <u>Watanabe et al.</u>

Again, "it is well settled that 'the Board [and Examiner] cannot simply reach conclusions based on [their] own understanding or experience - or on [their] assessment of what would be basic knowledge or common sense. Rather the Board [and Examiner] must point to some concrete evidence in the record in support of these findings." In re Zurko, 258 F. 3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). See also In re Lee, 277 F. 3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002).

These requirements of <u>evidenced</u> reasons supporting the obviousness conclusions are further supported by the recent KSR decision where the Supreme Court further reaffirmed <u>In re Kahn</u>, 441 F. 3d 977, 988 (CA Fed. 2006), which stated: "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

Here, though KSR articulates that a substitution with predicable results may be a reason to support an obviousness rejection, this is <u>only</u> a category, similar to motivation or suggestion requirements, and the remainder of the rejection evidence <u>must</u> be provided supporting the rejection rationale, i.e., the rejection <u>cannot</u> be based solely on a <u>conclusion</u> that the disc discrimination method of <u>Hwang</u> is an alternate and/or equivalent signal processing method compared to the methods of <u>Ogihara</u> or <u>Watanabe</u>. Evidence must be provided supporting that conclusion.

Accordingly, it is respectfully submitted that, without evidence in the record supporting these additional conclusions by the Examiner, the rejections fail to set forth a prima facie obviousness case. If the Office Action takes Official Notice of such deficient evidence applicants further respectfully request evidence be provided supporting the same.

REJECTION UNDER 35 USC §103

Claims 1-5, 15, 16, 18, 27, 28, and 30 stand rejected under 35 USC §103(a) as being unpatentable over Ogihara, U.S. Patent No. 6,868,051 (or European Patent No. 1191529), further considered with Hwang, European Patent No. 1041553; and claims 6-8, 17, 19-21, 29, 31-33, and 39-44 stand rejected under 35 USC §103(a) as being unpatentable over Ogihara further considered with Hwang, and further in view of Morita, U.S. Patent No. 6,207,247. These rejections are respectfully traversed.

Further to the above, the Office Action appears to indicate on page 3 that the base system of Ogihara is being used, including the detecting of amplitude values, for the purpose of disc discrimination, but that the remainder of the system of comparing the amplitude of the two band-pass filtered RF signals is being changed to both determine the corresponding wobble amplitude and to compare that determined amplitude to a pre-stored value.

The Office Action relies upon <u>Hwang</u> to disclose this alternative disc discrimination technique/method.

Applicants respectfully disagree as to what a combination of <u>Ogihara</u> and <u>Hwang</u> would encompass, and to the obviousness of modifying <u>Ogihara</u> to include such features of <u>Hwang</u>.

Teachings and Inventive Solutions of References Substantially Different

First, it is noted that a **primary** advantage and feature of <u>Ogihara</u> would appear to be observation of using the recording frequencies of different wobbles on different media, e.g., with differing track pitches resulting in different wobble frequencies or different media types recording wobbles with differing frequencies.

Using this knowledge of the expected frequencies, <u>Ogihara</u> sets forth two band-pass filters that can be used to differently band-pass the RF pickup signal. Thus, by merely observing the different outputs from the band-pass filters it can be determined whether the RF signal represents wobbles with a frequency consistent with a first media or whether the RF signal represents wobbles with a frequency consistent with a second media.

The primary focus and reliance of <u>Ogihara</u> is on these different frequency characteristics, and that the frequency characteristics can be monitored to determine the media type.

Differently, <u>Hwang</u> is based on a premise that due to the different track pitches and different recording methodologies there will be correspondingly detectable changes in the envelope of an RF pickup signal.

As explained beginning in col. 4, line 55, Hwang explains:

Here, since the track pitch of the CD is not less than two times greater than that of

the DVD-ROM, referring to FIGS. 1A and 1B, an amplitude of RF signals of the adjacent tracks, which is detected when a beam spot is positioned between the tracks in case of a CD, becomes relatively smaller than that in the case of a DVD-ROM. In the case of both a CD and a DVD-ROM, the amplitude of the RF signal becomes large in a track area where data pits exist, and becomes small between the tracks, referring to FIGS. 3A and 3B. Meanwhile, data is recorded on both a land and a groove in case of a DVD-RAM. When a depth between a land and a groove is $6/\lambda$, a cross-talk can be minimized. Accordingly, although an optical beam traverses each track, there is no change in the amplitude of the RF signal, referring to FIG. 3C.

As described above, the amplitude of the RF signal varies according to the type of the discs loaded in the optical disc recording and/or reproducing apparatus. The present invention discriminates a type of the disc using the above feature.

Thus, FIGS. 3A-3C of <u>Hwang</u> illustrate that there are more changes of the envelope of the RF signal for a CD, than the DVD-ROM, with both having more changes of envelopes compared to DVD-RAM. For example, the CD and the DVD-ROM have pits on only groove areas, and thus will have greater variation between land and groove observations compared to a DVD-RAM, which has pitting on both land and groove areas. Further, there will be greater variations caused by the CD recording scheme than the DVD-ROM recording scheme.

Accordingly, a focus of <u>Hwang</u> is on using these differences in envelope maxims, quantified through an averaging of envelope samples, and determining the type of media based upon the a calculated average change in envelope.

A minimum average level represents a DVD-RAM, an average level meeting a predetermined first level represents a DVD-ROM, and an average level meeting a greater predetermined level represents a CD.

The two systems of <u>Ogihara</u> and <u>Hwang</u> are different and perform disc discrimination in substantially different ways, based on substantially different underlying known characters of different media.

Ogihara is focused on using the frequency of the wobbles in different media to determine the media type, while Hwang is focused on using the differences in changes of RF maxims between different media.

Accordingly, it is respectfully submitted that there is no reason why one skilled in the art would look to Hwang to solve the problem of Qgihara, without substantially changing the underlying process of Qgihara.

MPEP 2143.01 emphasizes that: "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the

teachings of the references are not sufficient to render the claims prima facie obvious." Citing In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)(The court reversed the underlying rejection, holding the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate")

Based on the proposed changing of <u>Ogihara</u>, there would have to be changes to the system of <u>Ogihara</u> that would essentially nullify the relied upon principle of the different frequencies of the respective wobbling in different media, i.e., the majority of the apparent inventive advantages of <u>Ogihara</u> would have to be discarded to achieve the Office Action suggested advantages of the invention of <u>Hwang</u>.

Based on the above mentioned MPEP 2143.01, such a modification of <u>Ogihara</u> would <u>not</u> have been obvious.

Though an end result may be similar, i.e., disc discrimination, how one skilled in the art would get there is also of importance. <u>Ohihara</u> sets forth a different disc discrimination approach and based on different fundamentals than <u>Hwang</u>.

Not Mere Substitution

Further, such a modification of <u>Ogihara</u> would not have been equivalent or a simple substitution of elements, as <u>Ogihara</u> already simply uses two filters and a comparator, with the filters directly bandpass filtering the RF pickup signal. No actual measurements are necessary, no looking up of predetermined levels, and no comparisons of the measured levels with the predetermined levels would be needed.

However, if <u>Ogihara</u> were modified as suggested in the Office Action, an additional memory, a lookup capability, a computational capability to calculate the changed envelope, and two comparators would be necessary to compare the result of the calculations to the two different predetermined values.

The modification would not simplify the system of Ogihara, but add complexity.

The Office Action appears to indicate that potentially not all of the features of <u>Ogihara</u> would be no longer necessary and/or that not all necessary features of <u>Hwang</u> would be incorporated into <u>Ogihara</u>, but rather that if one skilled in the art reviewing <u>Ogihara</u> were to also review a 'teaching' of <u>Hwang</u> to look up a characteristic of the RF signal with a pre-set value, then that skilled person would have either tried to implement the same in <u>Ogihara</u> or that that skilled person would have implemented the same since it would have been an equal alternative.

However, whether such an implementation of a combination of teachings from Ogihara and Hwang would have been obvious must still consider the underlying reasons why one skilled in the art would put the Office Action selected features together as proposed in the Office Action, compared to alternate combinations, and/or how and why one skilled in the art would have gone from the general knowledge concepts of both references and decided to compare the actual RF signals to preset values or the claimed determined wobble amplitude to preset values.

Though one skilled in the art may have the knowledge of both references does not mean that any and all combinations of features from those references are obvious.

Additional reasons supporting such an obviousness conclusion are needed to go from the general knowledge of what the references disclose or teach to the end product that could be interpreted as reading on the pending claims.

The Office Action has failed to disclose or reference these additional reasons, or why one skilled in the art would add the abovementioned complexities to the system of Ogihara.

Reasonable Chance of Success and End Product

In this regard another required element of a prima facie obviousness case if that the Office Action suggested combination have a reasonable change of success.

The Office Action is unclear what an end product of a modified <u>Ogihara</u> would look like, or how the apparent brief relied upon teachings of <u>Hwang</u> would or could be implemented by <u>Ogihara</u> to meet the claimed detection of the wobble amplitude, or the claimed comparison of the detected wobble amplitude with a pre-set wobble amplitude reference value.

As noted above, the Office Action states that the 'base' system of <u>Ogihara</u> is being relied upon, and that base system would implement a teaching of <u>Hwang</u> to implement the claimed invention.

However, as noted above, <u>Ogihara</u> merely identifies which frequency is more prevalent in an RF pickup signal, such that the prevalent frequency corresponds an expected medium.

An apparent 'base' system of <u>Ogihara</u> that is being relied upon in the Office Action is the pickup, the resultant RF pickup signal that is affected by wobble recording frequencies, and an output element to identify which media is detected.

Hwang similarly has a pickup, a resultant RF pickup signal, and an output element to identify which media is detected.

Hwang monitors the change in amplitude maxims of a the RF signal and uses this change to identify the type of media. This change is measured based upon the envelope of the

RF signal, as a measured average envelope signal. If the above zero and below zero maxims of the RF signal envelope are nearly always equal, then the average envelope will be very small. Conversely, if the above zero and below zero maxims of the RF signal envelope change, such as in CDs, then the average envelope will be greater and non-zero.

Here, based on the Office Action indicated 'teaching' of <u>Hwang</u>, that is relied upon to modify the 'base' system of <u>Ogihara</u>, it is <u>unclear</u> how or to what extent the actual implementations of the teachings of Hwang are implemented.

All optical pickups may generate RF pickup signals, and those RF pickup signals are typically converted to some digital form to read data from the medium.

Thus, an aspect of <u>Hwang</u> beyond merely measuring the RF signal would appear to be relied upon by the Office Action.

Thus, <u>Hwang</u> further teaches to measure the <u>change</u> in maxims of the RF signal.

Hwang does <u>not</u> teach to measure the RF signal for comparison of that RF signal to a pre-set value, but rather to observe the RF signal to discern how much that signal changes.

Here, it is believed the Office Action may have misinterpreted the teaching of <u>Hwang</u> or relied upon a step <u>before</u> observing such a <u>change</u> in maxims, i.e., the Office Action appears to rely on <u>Hwang</u> to teach that disc discrimination can be based on measuring an RF signal amplitude and comparing that amplitude to a pre-set value.

However, as noted above, this is not the disclosure or teaching of <u>Hwang</u>.

Thus, the actual end product relied upon by the Office Action would <u>not</u> measure the RF signal, or even an amplitude of the wobble, and compare the same to a pre-set value.

Rather, the end product would measure the <u>change</u> in RF maxims. Less change would mean that data may be stored on both lands and grooves, while greater change would represent that data may be stored on only one of the lands or grooves.

Any end product designed by the Examiner based upon the teachings of the relied upon references must still meet all claim features.

One skilled in the art looking at the two references would <u>not</u> expect a modification of either reference, or a combination based on the teaching of both references, to measure a feature different from the frequency (<u>Ogihara</u>) or <u>change</u> in maxim (<u>Hwang</u>), i.e., one skilled in the art would not discern from <u>Ogihara</u> and <u>Hwang</u> to measure an amplitude of the RF and compare that to a pre-set value, or further to <u>detect</u> an <u>amplitude of a wobble and compare that to a pre-set value.</u>

Accordingly, if the Office Action maintains that a proposed combination of <u>Ogihara</u> and <u>Hwang</u>, then applicants respectfully request the examiner specifically identify what signal is measured, e.g., the RF signal, what aspect of that RF signal is observed, e.g., the frequency <u>or</u> maxim change, and what resultant observed 'amplitude' is compared to a pre-set value.

Conversely, as noted above, it is respectfully submitted that because such details have not been particularly identified in the Office Action, the Office Action fails to meet the required reasonable change of success.

Independent claims 1, 6-8, 15, 19-21, 27, and 34, for example, include such a required detection of the wobble amplitude and comparison with a pres-set value.

Accordingly, it is respectfully submitted that claims 1, 6-8, 15, 19-21, 27, and 34, and corresponding dependent claims, are allowable over either of Ogihara and/or Hwang.

Claims 1, 2, 15, and 27 stand rejected under 35 USC §103(a) as being unpatentable over Watanabe et al., U.S. Patent No. 6,493,304, further considered with Japanese Patent No. 2000-285582 (JP '582); claims 5, 16, and 28 stand rejected under 35 USC §103(a) as being unpatentable over Watanabe et al., further considered with JP '582, and further in view of Ogihara; and claims 3, 4, 17, 18, 29, 30-33, and 38-44 stand rejected under 35 USC §103(a) as being unpatentable over Watanabe et al., further considered with JP '582, and further in view of Ohta, U.S. Patent No. 6,751,171. These rejections are respectfully traversed.

As noted in the Office Action, <u>JP '582</u> corresponds to the above discussed <u>Hwang</u>, European Patent No. 104155. Accordingly, below references for <u>JP '582</u> will be made through the repeated reference to Hwang for consistency with the above remarks.

Similar to above, the Office Action has indicated that though <u>Watanabe et al.</u> may adequately solve its respective problems, without error, it still would have been obvious to change <u>Watanabe et al.</u> to have included the Office Action Interpreted alternate equivalent comparison feature from <u>Hwang</u>.

Specifically, on page 5, the Office Action first merely states that <u>Watanabe et al.</u>, in col. 23, lines 47-61, sets forth an amplitude detection capability for a wobble signal "wherein such detection can distinguish between various DVD discs."

The Office Action further states that <u>Watanabe et al.</u> fails to particularly identify what a reference value would be for comparing with a detected wobble signal, and relies upon <u>Hwang</u> for setting forth comparing detected RF signals with pre-stored values. As noted, the Office Action has further concluded that the changing of <u>Watanabe et al.</u> to include such an RF

comparison feature of <u>Hwang</u> would have been obvious since it would be merely a substitution of alternate equivalent elements.

Lastly, beginning at the bottom of page 5, the Office Action indicates that if <u>Hwang</u> were to be used instead of the system of <u>Watanabe et al.</u>, or in combination, then additional types of media could be reviewed or detected.

However, again, it is respectfully submitted that the Office Action has not given any consideration to the actual and underlying inventions and processes of <u>Watanabe et al.</u> and <u>Hwang</u>.

For example, the Office Action broadly notes that <u>Watanabe et al.</u> sets forth wobble amplitude detection, without explaining that the 'amplitude' detection is only an Yes/No determination of whether wobbles are present, i.e., there is <u>no</u> detection of the actual amplitude, only whether the wobble is present.

Indicating that <u>Watanabe et al.</u> sets forth amplitude detection give the incorrect insinuation that additional amplitude detection and anything modifying amplitude detection would be within the focus of <u>Watanabe et al.</u>, when the actual detection in <u>Watanabe</u> is performed irrespective of the actual amplitude of the wobble.

Similarly, the Office Action broadly notes that <u>Hwang</u> implements 'comparisons with prestored RF signals (since they are different for various types of discs)', and further that <u>Hwang</u> 'provides for further identification [with regard to] additional types of rom/ram discs'.

This is a <u>selective</u> interpretation of the system of <u>Hwang</u> which again gives the wrong impression that it may be relevant or related to the operation of Watanabe et al.

Conversely, the 'identification' of different types of discs in <u>Hwang</u> is based on comparing <u>changes in maxims (i.e., envelope)</u> with preset values to determine the disc type, with this changing in envelope being performed by calculating an averaged envelope of the RF signal and comparing that calculated average with a preset value. <u>Again, this calculated average indicates the amount of change in maxims of the RF signal, based on the premise that the RF maxims will vary more in some media than other.</u>

Thus, merely indicating that <u>Hwang</u> detects RF amplitudes and compares that detected amplitude to a pre-stored value is a mischaracterization of <u>Hwang</u>, as it insinuates that <u>Hwang</u> performs an operation that is **not** implemented by Hwang.

Still further, the Office Action further gives the impression that <u>Hwang</u> could be performing wobble detection or that the detection of the changing in amplitude could be representative of wobble presence/non-presence.

However, this is similarly a mischaracterization of <u>Hwang</u>, which compares changes in the envelope based on a premise of the amount of reflection a beam spot will provide in different land/groove areas based on whether data is stored in those areas and based on how much cross-talk will exist. A CD has a different pitch than DVD-ROM and DVD-RAM media, and CDs and DVD-ROM media have data recorded on only groove or land areas, while DVD-RAM media can have data recorded on both groove and land areas.

There is no support in the record that the addition or lack of wobbles in the land/groove side walls will affect or change the corresponding <u>change</u> in <u>envelope</u>, calculated through an <u>averaging</u> of envelope samples.

Further, there is no evidence in the record that a potential minor variance added to an RF signal from a wobble would be sufficient enough to be detected when such a system also has to account for expected errors in RF values, i.e., such wobbling may add such a minimal variance to a system of Hwang, that could be ignored, especially considering the averaging aspect of Hwang.

Accordingly, <u>Hwang</u> does <u>not</u> perform disc discrimination based upon <u>wobbles</u>, but rather based on the detectable changing of the envelope that can clearly delineate different media types.

Thus, through a complete interpretation of <u>Watanabe et al.</u>, i.e., of merely detecting for the presence of a wobble, and a complete interpretation of <u>Hwang</u>, i.e., of detecting the RF envelope changes to identify the areas of data recording and potential cross-talk, it should be clear that one skilled in the art would <u>not</u> look to <u>Hwang</u> to modify <u>Watanabe et al.</u> to further define the brief wobble existence detection.

Lastly, the Office Action indicates that it would have been obvious to modify <u>Watanabe et al.</u>, in view of <u>Hwang</u>, to permit the detection of additional ROM/RAM discs.

However, <u>Watanabe et al.</u> already detects between ROM/RAM disc, as well as a multitude of other types of CDs and DVDs.

In particular, the Office Action relied upon portion of <u>Watanabe et al.</u> is specifically directed to detecting whether the media is a ROM/RAM disc.

Thus, there is <u>no</u> reason to modify <u>Watanabe et al.</u>

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As noted above, there is further no evidence in the record that the system of <u>Hwang</u> is a equal and alternate disc discrimination method.

Conversely, <u>Watanabe et al.</u> sets forth a sophisticated system of detecting a multitude of disc types, and further does not need to perform the <u>Hwang</u> average envelope calculation and comparison with a pre-set value.

With regard to related portion of <u>Watanabe et al.</u>, like <u>Ogihara</u> above, this portion of Watanabe et al. sets forth a more simple and less costly approach for the ROM/RAM detection

<u>Watanabe et al.</u> sets forth the knowledge of wobbles existing in the RAM disc, and not the ROM disc, as helpful in determining whether an input disk is a RAM or ROM disc.

Accordingly, in addition to there being no need or desire to detect the amplitude of a wobble and compare that to a pre-set wobble amplitude reference value in <u>Watanabe</u> or <u>Hwang</u>, or a combination of the two, there is further no evidence in the record that such a combination would even set forth the claimed invention.

Applicants again respectfully submit that the pending claims are patentably distinct from any of the relied upon references, alone or in combination, and that all pending claims in allowable condition.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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